

DATE PLOTTED: 12 December 2019 2:29 PM BY: MICHAEL CRANE

XREF: XR-967192-CADASTRAL; XR-967192-DESIGN-CONTOURS-STG6; XR-967192-EXISTING-CONTOURS-STG6; XR-967192-DESIGN-CONTOURS-STG6; XR-967192-EXISTING-CONTOURS-STG6; XR-967192-DESIGN-CONTOURS-STG6; XR-967192-EXISTING-CONTOURS-STG6

Q50 LEVELS
CRYSTAL CRESCENT / DOLLY DRIVE (ROAD E)

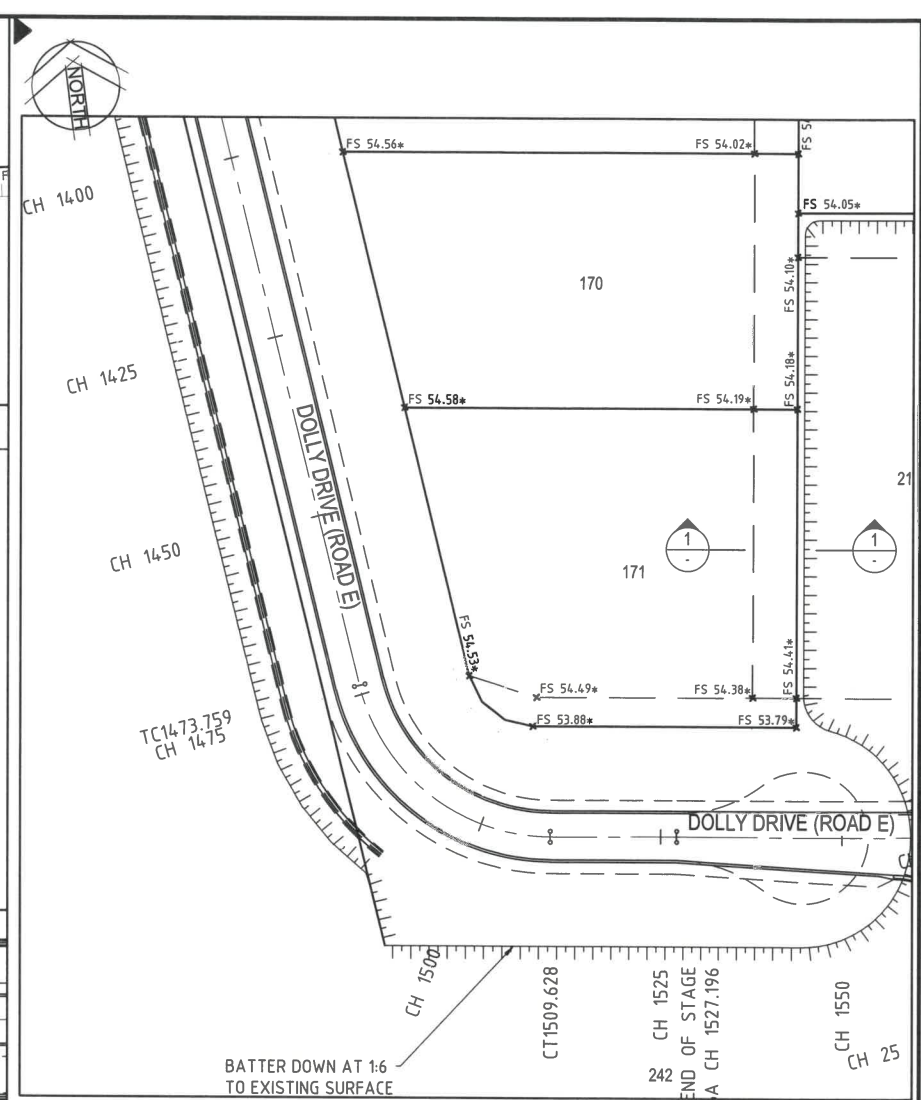
CHAINAGE	LHS LEVEL	RHS LEVEL
1225	-	53.4
1250	-	53.4
1275	-	53.4
1300	-	53.4
1325	-	53.5
1350	-	53.7
1375	-	53.8
1400	-	53.9
1425	-	53.9
1450	-	53.9
1475	-	53.9
1500	-	53.9
1525	53.6	53.9

Q50 LEVELS
CRYSTAL CRESCENT (ROAD F)

CHAINAGE	LHS LEVEL	RHS LEVEL
25	53.4	53.5
50	53.4	53.4
75	53.4	53.4
100	53.3	53.4
125	53.1	53.4
150	53.1	53.3
175	53.0	53.3
200	52.9	53.2
225	51.9	53.2
250	51.9	53.2
275	53.0	53.4
300	53.2	53.5
325	53.3	53.6
350	53.5	53.7
375	53.6	53.8
400	53.7	54.0

Q50 LEVELS
RIPPLE STREET (ROAD G)

CHAINAGE	LHS LEVEL	RHS LEVEL
232.765	52.5	52.8
250	52.6	52.8
275	52.7	52.9
300	52.9	53.0
325	53.1	53.1

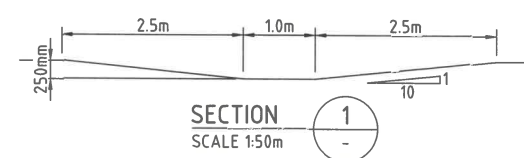


NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL STANDARD ROADWORKS AND STORMWATER DRAWINGS.
- ALL BACKFILL IS COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAXIMUM DRY DENSITY TO AS1289 IN MAXIMUM 150mm LAYERS UNLESS NOTED OTHERWISE.
- ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
- ALLOTMENTS ARE GRADED EVENLY BETWEEN LEVELS SHOWN. CONSTRUCTED LOT GRADE IS MINIMUM 1:400.
- ALL BATTERS WITHIN ALLOTMENTS ARE MAXIMUM 1 : 6 UNLESS NOTED OTHERWISE.

LEGEND

- FS 11.05* CERTIFIED FINISHED ALLOTMENT LEVEL
- FS 11.05 EXIST EXISTING ALLOTMENT LEVEL
- TOP OF BATTER
- BOTTOM OF BATTER



CARDNO (OLD) PTY LTD HEREBY CERTIFY THAT THE WORKS AS SHOWN ON THE AS CONSTRUCTED DRAWINGS REFLECT ANY CHANGES THAT WERE MADE DURING THE COURSE OF CONSTRUCTION.

10801 RPEQ NO.
12/12/2019 DATE

AS CONSTRUCTED
Rowlands Surveys Pty Ltd (ACN 010 025 268) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.
Date: 12/12/2019
Laurence John Nolan
Director / Registered Surveyor

Rev.	Date	Description	Des.	Verif.	Appd.
A	12/12/2019	AS-CONSTRUCTED ISSUE	LL	JW	MB

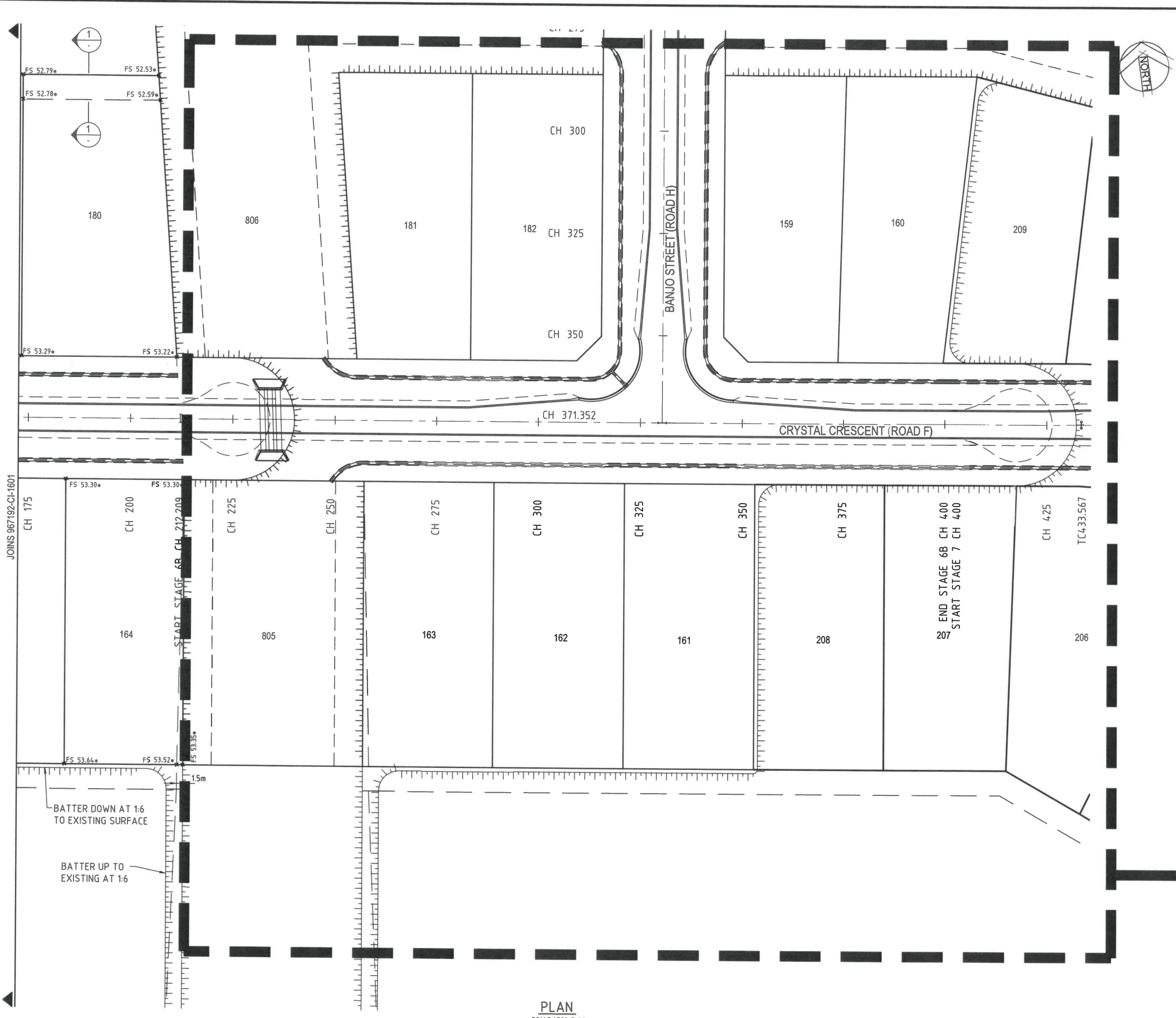


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Townsville, QLD 4810
Tel: 07 4772 1166 Fax: 07 4721 2508
Web: www.cardno.com.au

Drawn	Date	Client
LL	12/12/2019	MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB	12/12/2019	Project MOUNT MARGARET, ALICE RIVER
Designed	12/12/2019	STAGE 6A
Verified MB	12/12/2019	AS-CONSTRUCTED
Approved MB	12/12/2019	Title
MB	12/12/2019	10801
		EARTHWORKS LAYOUT PLAN
		SHEET 1 OF 2

Status		Scale		Size
AS CONSTRUCTED		As Shown		A1
Datum	Date	Scale	Revision	
A.H.D	12/12/2019	As Shown	A	
Drawing Number		Revision		
967192-CI-1601		A		



NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL STANDARD ROADWORKS AND STORMWATER DRAWINGS.
- ALL BACKFILL IS COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAXIMUM DRY DENSITY TO AS1289 IN MAXIMUM 150mm LAYERS UNLESS NOTED OTHERWISE.
- ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
- ALLOTMENTS ARE GRADED EVENLY BETWEEN LEVELS SHOWN. CONSTRUCTED LOT GRADE IS MINIMUM 1:4.00.
- ALL BATTERS WITHIN ALLOTMENTS ARE MAXIMUM 1 : 6 UNLESS NOTED OTHERWISE.

LEGEND

- FS 11.05* CERTIFIED FINISHED ALLOTMENT LEVEL
- FS 11.05 EXISTING ALLOTMENT LEVEL
- TOP OF BATTER
- BOTTOM OF BATTER

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Lawrence John Nolan
Director / Registered Surveyor
Date: 12/12/2019

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[Signature] RPEQ
10801 RPEQ NO.
12/12/2019 DATE

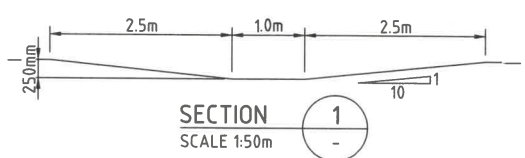
Q50 LEVELS
CRYSTAL CRESCENT (ROAD F)

CHAINAGE	LHS LEVEL	RHS LEVEL
25	53.4	53.5
50	53.4	53.4
75	53.4	53.4
100	53.3	53.4
125	53.1	53.4
150	53.1	53.3
175	53.0	53.3
200	52.9	53.2
225	51.9	53.2
250	51.9	53.2
275	53.0	53.4
300	53.2	53.5
325	53.3	53.6
350	53.5	53.7
375	53.6	53.8
400	53.7	54.0

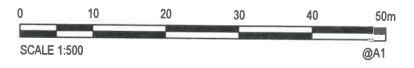
Q50 LEVELS
BANJO STREET (ROAD H)

CHAINAGE	LHS LEVEL	RHS LEVEL
89.105	52.1	52.0
100	52.1	52.1
125	52.3	52.2
150	52.4	52.3
175	52.5	52.3
200	52.6	52.3
225	52.7	52.2
250	52.7	51.9
275	52.7	51.9
300	53.1	53.0
325	53.2	53.0
350	53.4	53.3

FUTURE STAGE 6B



PLAN
SCALE 1:500 @ A1



Rev.	Date	Description	Des.	Verif.	Appd.
A	12/12/2019	AS-CONSTRUCTED ISSUE	LL	JW	MB

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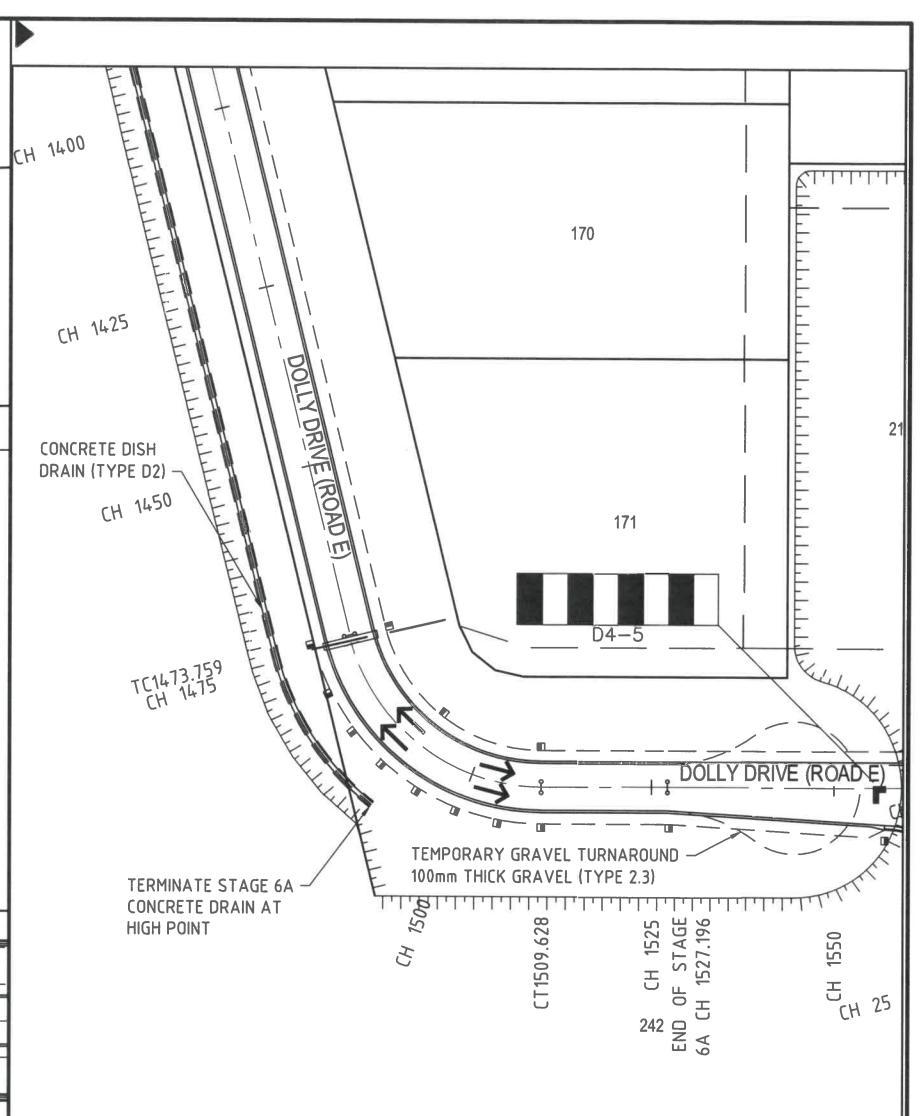
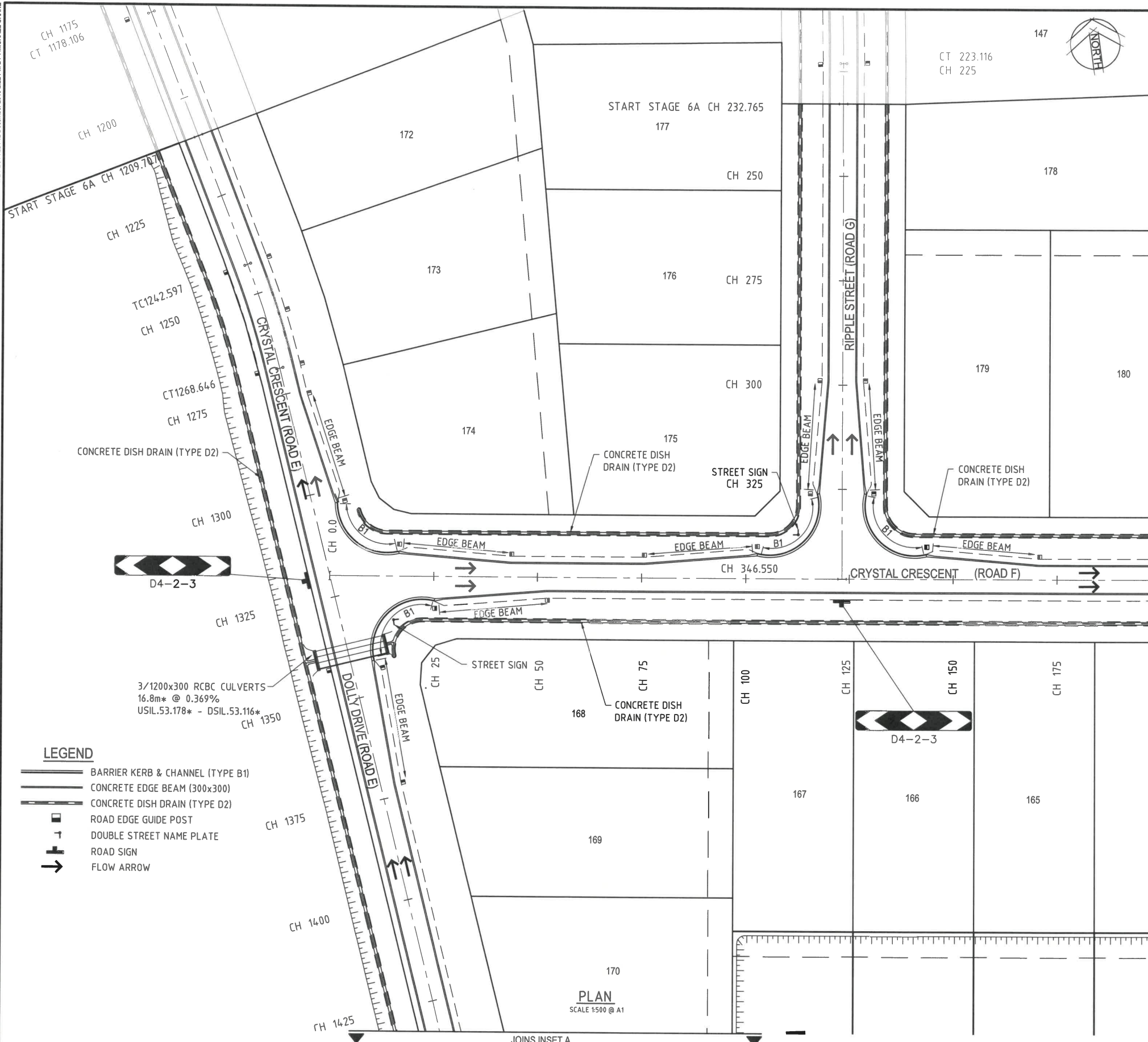
Drawn	LL	Date	12/12/2019
Checked	MB	Date	12/12/2019
Designed		Date	12/12/2019
Verified		Date	12/12/2019
Approved	<i>[Signature]</i>	Date	12/12/2019
MB		Date	12/12/2019

Client **MOUNT MARGARET DEVELOPMENTS PTY LTD**
Project **MOUNT MARGARET, ALICE RIVER**
STAGE 6A
AS-CONSTRUCTED
Title **EARTHWORKS LAYOUT PLAN**
SHEET 2 OF 2

Status AS CONSTRUCTED			
Datum	Date	Scale	Size
A.H.D	12/12/2019	As Shown	A1
Drawing Number	967192-CI-1602		Revision
			A

DATE PLOTTED: 12 December 2019 2:22 PM BY: MICHAEL CRANE

XREF: XR-967192-MASTER, XR-967192-CADASTRAL
 CAD FILE: S:\PROJECTS\TOWNSVILLE OFFICE\967192 - Mount Margaret\ENGINEERING\AS CONSTRUCTED\STAGE 6\967192-CI-1603.dwg



INSET A
SCALE 1:500 @ A1

STORMWATER & ROADWORK NOTES

1. ALL DRAINAGE LINES ARE RCBC'S UNLESS NOTED OTHERWISE,
2. CRUSHER DUST USED FOR BACKFILLING OF ALL LINES THAT ARE LOCATED UNDER ROADWAYS.
3. HEADWALLS ARE BY OTHERS.
4. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
5. STREET NAME SIGN INSTALLED AS PER COUNCIL STANDARD DRAWING SD-065.
6. FOR ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS REFER TO DRAWINGS 967192-CI-1605 TO 967192-CI-1611
7. FOR INTERSECTION DETAILS REFER TO DRAWINGS 967192-CI-1612 TO 1613

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
 Director / Registered Surveyor
 Date: 12/12/2019

CARDNO (QLD) PTY LTD HEREBY CERTIFY THAT THE WORKS AS SHOWN ON THE AS CONSTRUCTED DRAWINGS REFLECT ANY CHANGES THAT WERE MADE DURING THE COURSE OF CONSTRUCTION.

[Signature] RPEQ
 10801 RPEQ NO.
 12/12/2019 DATE

LEGEND

- BARRIER KERB & CHANNEL (TYPE B1)
- CONCRETE EDGE BEAM (300x300)
- CONCRETE DISH DRAIN (TYPE D2)
- ROAD EDGE GUIDE POST
- DOUBLE STREET NAME PLATE
- ROAD SIGN
- FLOW ARROW

PLAN
SCALE 1:500 @ A1



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Drawn	LL	Date	12/12/2019
Checked	MB	Date	12/12/2019
Designed		Date	12/12/2019
Verified	MB	Date	12/12/2019
Approved	<i>[Signature]</i>	Date	10801
	MB	Date	12/12/2019

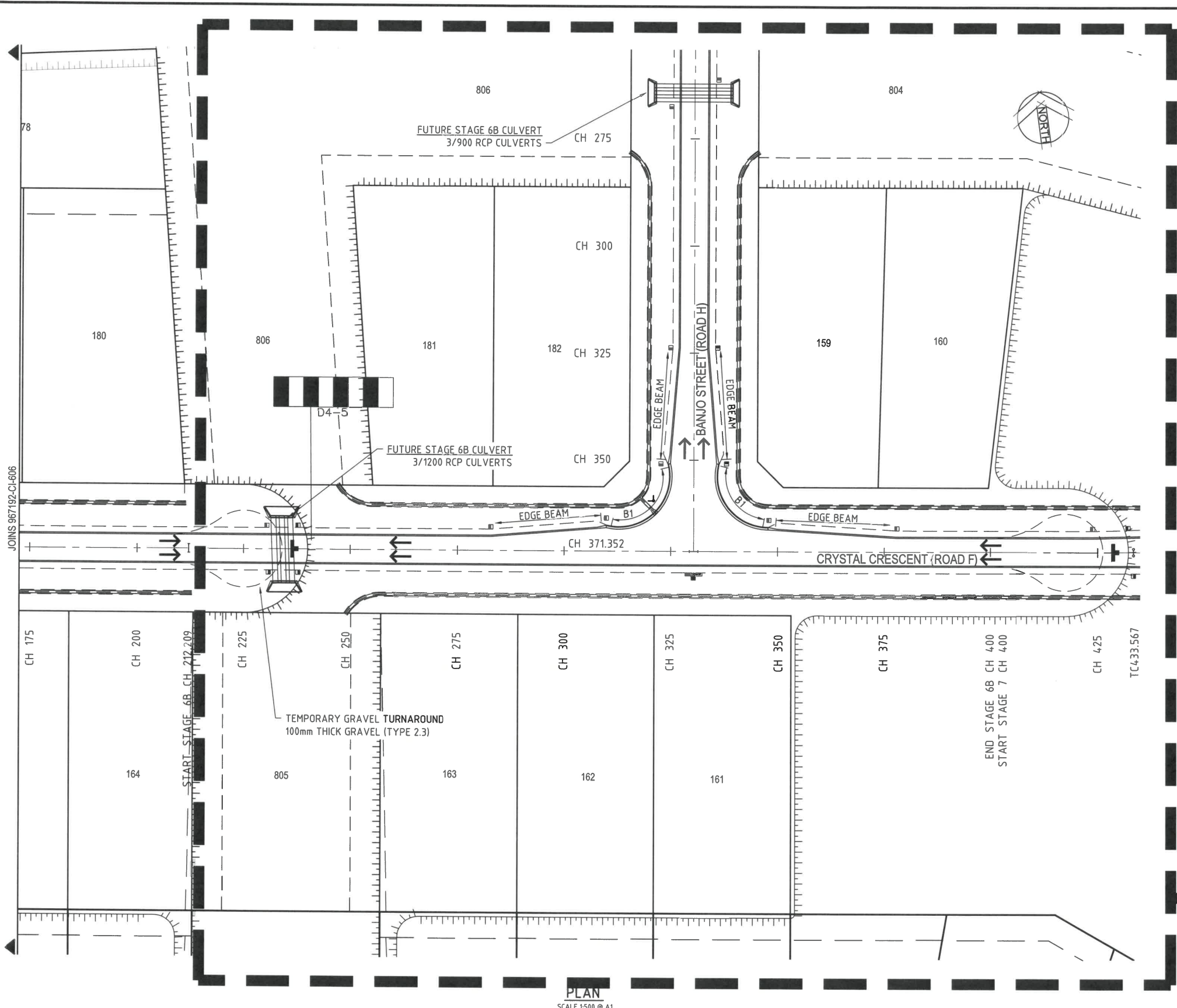
Client	MOUNT MARGARET DEVELOPMENTS PTY LTD
Project	MOUNT MARGARET, ALICE RIVER
	STAGE 6A
	AS-CONSTRUCTED
Title	ROADWORKS & STORMWATER DRAINAGE PLAN
	SHEET 1 OF 2

Status	AS CONSTRUCTED						
Datum	A.H.D	Date	12/12/2019	Scale	As Shown	Size	A1
Drawing Number	967192-CI-1603			Revision	A		

Rev.	Date	Description	LL	JW	MB
A	12/12/2019	AS-CONSTRUCTED ISSUE			

DATE PLOTTED: 12 December 2019 2:21 PM BY: MICHAEL CRANE

XREF: XR-967192-CADASTRAL-XR-967192-MASTER
 CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\967192-192 - Mount Margaret\ENGINEERING\AS CONSTRUCTED\STAGE 6\967192-CI-1604.dwg



STORMWATER & ROADWORK NOTES

1. ALL DRAINAGE LINES ARE RCBC'S UNLESS NOTED OTHERWISE
2. CRUSHER DUST USED FOR BACKFILLING OF ALL LINES THAT ARE LOCATED UNDER ROADWAYS.
3. HEADWALLS ARE BY OTHERS.
4. ALL CHAINAGES SHOWN ARE PEGGED CHAINAGES UNLESS SHOWN OTHERWISE.
5. STREET NAME SIGN INSTALLED AS PER COUNCIL STANDARD DRAWING SD-065.
6. FOR ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS REFER TO DRAWINGS 967192-CI-1605 TO 967192-CI-1611
7. FOR INTERSECTION DETAILS REFER TO DRAWINGS 967192-CI-1612 TO 1613

LEGEND

- BARRIER KERB & CHANNEL (TYPE B1)
- CONCRETE EDGE BEAM (300x300)
- CONCRETE DISH DRAIN (TYPE D2)
- ROAD EDGE GUIDE POST
- DOUBLE STREET NAME PLATE
- ROAD SIGN
- FLOW ARROW

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
 Director / Registered Surveyor
 Date: 12/12/2019

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[Signature] RPEQ
 10801 RPEQ NO.
 12/12/2019 DATE

PLAN
 SCALE 1:500 @ A1



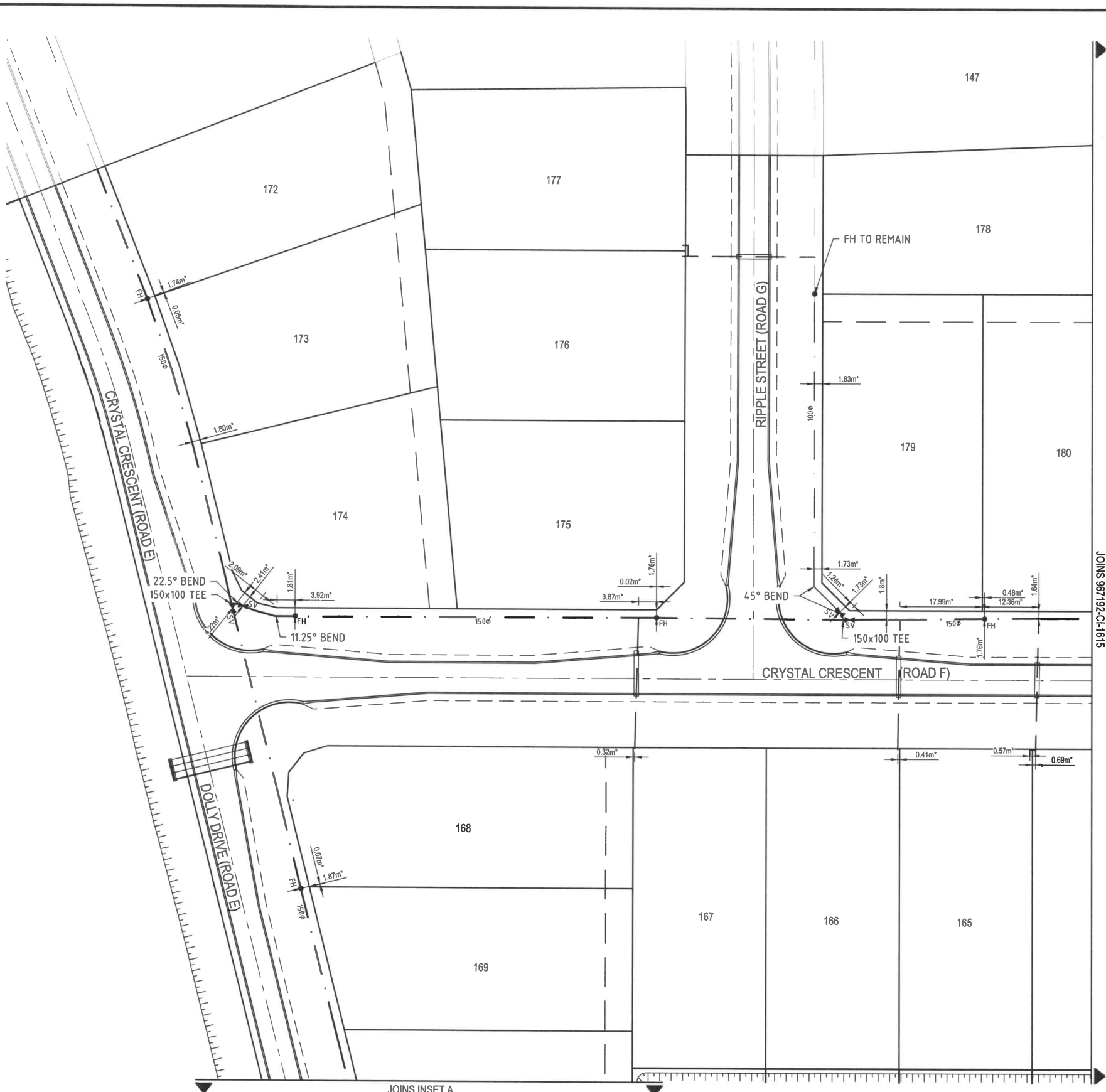
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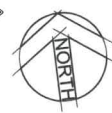
Drawn	LL	Date	12/12/2019	Client	MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked	MB	Date	12/12/2019	Project	MOUNT MARGARET, ALICE RIVER
Designed		Date	12/12/2019	Stage	STAGE 6A
Verified	MB	Date	12/12/2019	AS-CONSTRUCTED	
Approved	<i>[Signature]</i>	Date	10801	Title	ROADWORKS & STORMWATER DRAINAGE PLAN
		Date	12/12/2019		SHEET 2 OF 2

Status				AS CONSTRUCTED	
Datum	Date	Scale	Size	A1	
A.H.D	12/12/2019	As Shown			
Drawing Number	967192-CI-1604			Revision	
			A		

Rev.	Date	Description	Des.	Verif.	Appd.
A	12/12/2019	AS-CONSTRUCTED ISSUE	LL	JW	MB



PLAN
SCALE 1:500 @ A1



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT CITY COUNCIL STANDARD WATER DRAWINGS INCLUDING FORMER THURINGOWA STANDARD DRAWINGS.
2. CONNECTION TO EXISTING WATERMAIN CARRIED OUT BY THE COUNCIL AT CONTRACTORS COST.
3. ALL WATERMANS ARE LOCATED 1.8m +/- 0.1m OFF ROAD RESERVE ALIGNMENTS UNLESS NOTED OTHERWISE.
4. PIPES FOR WATER MAINS ARE PVC-U CLASS 16, OD COMPATIBLE TO AS1477, RUBBER RING JOINTED WITH SOCKETED DICI FITTINGS.
5. PIPE FITTINGS ARE DICI TO AS2280.
6. POLYTHENE PIPES ARE MDPE PN16 TO AS4130

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted 'a', have been constructed to the dimensions and levels shown

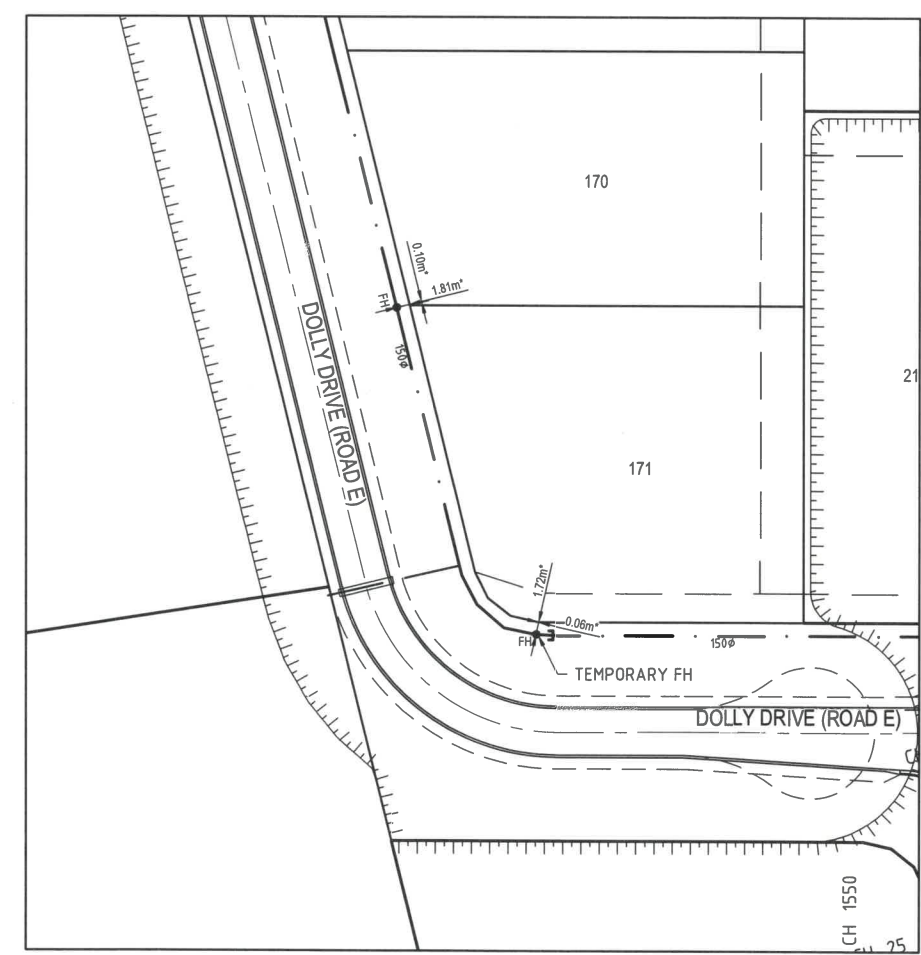
Laurence John Nolan
Director / Registered Surveyor
Date: 12/12/2019

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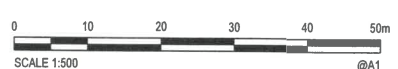
[Signature]
RPEQ
10801 RPEQ NO.
12/12/2019 DATE

LEGEND

- EXISTING WATERMAIN
- EXISTING FIRE HYDRANT
- EXISTING VALVE
- EXISTING TEE
- EXISTING END CAP
- WATERMAIN AND SIZE
- FIRE HYDRANT
- VALVE AND SIZE
- TEE
- END CAP
- 32 O.D. MDPE WITH ENVELOPER



INSET A
SCALE 1:500 @ A1



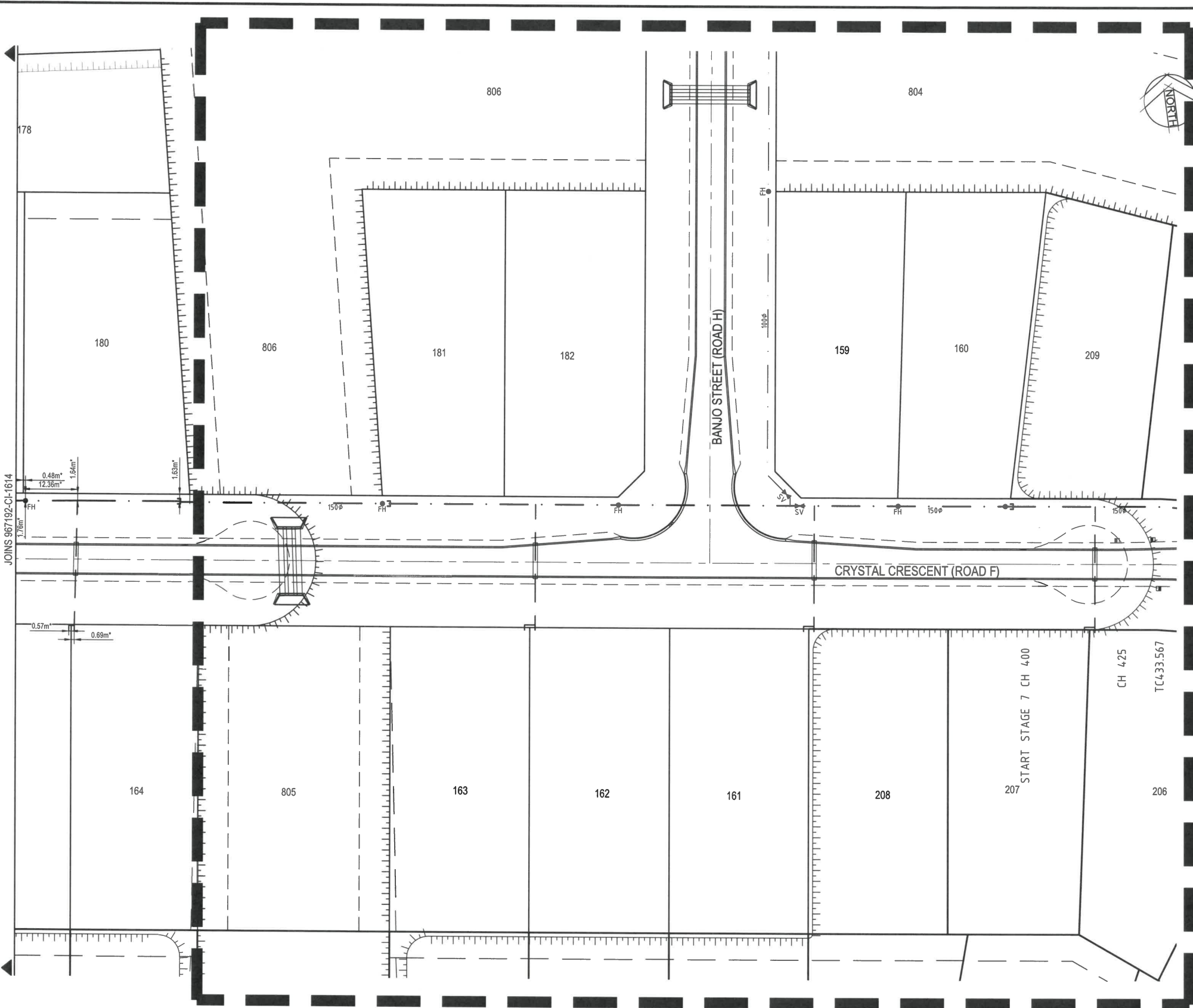
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Drawn LL 12/12/2019	Date	Client MOUNT MARGARET DEVELOPMENTS PTY LTD
Checked MB 12/12/2019	Date	Project MOUNT MARGARET, ALICE RIVER
Designed 12/12/2019	Date	Stage STAGE 6A
Verified MB 12/12/2019	Date	Title AS-CONSTRUCTED
Approved <i>[Signature]</i> MB 12/12/2019	Date	Drawing Number 967192-CI-1614

Status AS CONSTRUCTED			
Datum A.H.D	Date 12/12/2019	Scale As Shown	Size A1
Revision A			

Rev.	Date	Description	Des.	Verif.	Appd.
A	12/12/2019	AS-CONSTRUCTED ISSUE	LL	JW	MB



PLAN
 SCALE 1:500 @ A1

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT CITY COUNCIL STANDARD WATER DRAWINGS INCLUDING FORMER THURINGOWA STANDARD DRAWINGS.
2. CONNECTION TO EXISTING WATERMAIN ARE CARRIED OUT BY THE COUNCIL AT CONTRACTORS COST.
3. ALL WATERMANS ARE LOCATED 1.8m +/- 0.1m OFF ROAD RESERVE ALIGNMENTS UNLESS NOTED OTHERWISE.
4. PIPES FOR WATER MAINS ARE PVC-U CLASS 16, OD COMPATIBLE TO AS1477, RUBBER RING JOINTED WITH SOCKETED DICL FITTINGS.
5. PIPE FITTINGS ARE DICL TO AS2280.
6. POLYTHENE PIPES ARE MDPE PN16 TO AS4130

LEGEND

- - - - - EXISTING WATERMAIN
- - - - - EXISTING FIRE HYDRANT
- - - - - EXISTING VALVE
- - - - - EXISTING TEE
- - - - - EXISTING END CAP
- - - - - WATERMAIN AND SIZE
- - - - - FIRE HYDRANT
- - - - - VALVE AND SIZE
- - - - - TEE
- - - - - END CAP
- - - - - 32 O.D. MDPE WITH ENVELOPER

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
 Director / Registered Surveyor
 Date: 12/12/2019

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[Signature] RPEQ
 10801 RPEQ NO.
 12/12/2019 DATE

FUTURE STAGE 6B



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 Web: www.cardno.com.au

Drawn LL 12/12/2019	Date 12/12/2019	Client MOUNT MARGARET DEVELOPMENTS PTY LTD	Status AS CONSTRUCTED
Checked MB 12/12/2019	Date 12/12/2019	Project MOUNT MARGARET, ALICE RIVER STAGE 6A AS-CONSTRUCTED	Datum A.H.D.
Designed Date 12/12/2019	Date 12/12/2019	Title WATER RETICULATION LAYOUT PLAN SHEET 2 OF 2	Date 12/12/2019
Verified MB 12/12/2019	Date 12/12/2019	Scale As Shown	Size A1
Approved <i>[Signature]</i> MB 12/12/2019	10801	Revision A	Drawing Number 967192-CI-1615